Message

From: Daisy Wang [Daisy.Wang@erg.com]

Sent: 4/26/2018 1:16:41 PM

To: Burdett, Cheryl [burdett.cheryl@epa.gov]

CC: Bahr, Ryan [bahr.ryan@epa.gov]; Jessica Gray [Jessica.Gray@erg.com]

Subject: RE: R5 CSD Sampling: Lab Update

Attachments: WSL IsotopeMethodsQAPP07222015.pdf

Good morning Cheryl,

The University of Nebraska will analyze for nitrates and the N-15 isotope of nitrate. There isn't a standard method number for the method that they're using – they've provided us with their QAP, which summarizes the method (see attached).

The lab director (Daniel Snow) sent us the following table along with their QAP:

Analyte	Sample Volume and Container provided	Preservation	Hold Time
NO3N	125 mL	Freeze to -20oF	28 days
15N-NO3/18O-NO3N	same	same	same

Their normal turnaround is 28-42 days for this new method, and they will be able to meet this turnaround time for the requested number of samples (95).

In addition, they verbally confirmed that they would be able to send you the required sampling bottles and shipping materials. I think it would be easier for you to coordinate directly with the lab on the sampling materials. The contact for the lab is:

Daniel D. Snow, Ph.D.

Laboratory Director

e: dsnow1@unl.edu | p:1 402.472.7539 | f. 1 402.472.9599 | c: 1 402.304.3748

Can you please keep me copied on any emails you send to the lab, or let me know if any issues come up? I'll give Daniel a heads up that you'll be reaching out to him. In the meantime, we're wrapping up the contracting paperwork. Please let me know if you have any other questions.

Thanks,

Daisy Wang 703-829-0539

Eastern Research Group (ERG)

14555 Avion Parkway, Suite 200 Chantilly, VA 20151 From: Burdett, Cheryl <burdett.cheryl@epa.gov>

Sent: Thursday, April 26, 2018 8:27 AM **To:** Daisy Wang < Daisy. Wang@erg.com>

Cc: Bahr, Ryan <bahr.ryan@epa.gov>; Jessica Gray <Jessica.Gray@erg.com>

Subject: Re: R5 CSD Sampling: Lab Update

Hi Daisy:

For the University of Nebraska Laboratory am I sending them a sample is the holding time 48 hours? Are they just analyzing for the N15 Isoptope? What is the method they will be using so that I can add it to my QAPP?

Sincerely,

Cheryl Burdett

From: Daisy Wang < <u>Daisy.Wang@erg.com</u>>
Sent: Wednesday, April 25, 2018 2:56:10 PM

To: Burdett, Cheryl

Cc: Bahr, Ryan; Jessica Gray

Subject: RE: R5 CSD Sampling: Lab Update

Hi Cheryl,

Quick update: We were able to work things out with the University of Nebraska. We are working to issue the final purchase order by the end of this week, so that you can send samples for the N15 isotope analysis next week. As we've previously discussed, the lab's period of performance start date will be Tuesday (5/1). We assume that any samples you collect on Monday will be shipped overnight and arrive at the lab Tuesday morning.

We are still coordinating with the WI State Lab of Hygiene.

Please let me know if you have any questions. Thanks,

Daisy Wang 703-829-0539

Eastern Research Group (ERG) 14555 Avion Parkway, Suite 200 Chantilly, VA 20151 From: Daisy Wang

Sent: Wednesday, April 25, 2018 1:28 PM **To:** 'Burdett, Cheryl' < burdett.cheryl@epa.gov>

Cc: 'Bahr, Ryan' <bahr.ryan@epa.gov>; Jessica Gray <<u>Jessica.Gray@erg.com</u>>

Subject: R5 CSD Sampling: Lab Update

Hi Cheryl,

Attached, please find ERG's comments on the sampling QAPP. Please note that we have not yet finalized the paperwork on the WI State Lab of Hygiene or the University of Nebraska Water Sciences Laboratory. Can we have a call this afternoon to discuss in more detail?

The current status of each lab is the following:

WI State Lab of Hygiene – The lab should be submitting their price proposal to ERG today (4/25).

N15 Isotope Lab

<u>University of Nebraska Water Sciences Laboratory</u> – We have a price proposal from this lab, but are still negotiating with their legal team on the contract terms and conditions. They've requested changes to certain portions of the contract language that cannot be changed. We are hopeful that we can work things out because we were able to successfully subcontract with this same lab under a different EPA contract.

Please note that I've edited the sampling parameters table in the QAPP (included here for your reference, with changes highlighted):

Nitrate and N15 Isotope	
Bottle Type	250 ml high-density polyethylene cylinder-round with polyethylene unlined cap (liquids). Grab sample
Preservation	Freeze to -20 degrees F
Holding Times	28 days
Number of samples	89
Duplicates	None

<u>UC Davis Stable Isotope Facility</u> – We are still pursuing this lab in case the University of Nebraska does not work out. The lab has verbally told me that they have no issues with the contract terms and conditions, but they have very specific scheduling and sample preparation requirements that we're trying to figure out. The problem is that the lab project manager in charge of the N15 isotope analysis has been very slow to respond and difficult to coordinate with.

In case we need to go with the UC Davis lab, here is the QAPP table populated with the relevant details for UC Davis. Some of the details still need to be confirmed:

Nitrate and N15 Isotope		
Bottle Type	30-60 mL nitrate-free, freezable, wide-mouthed, screw-top containers	
Preservation	filtered (<0.45 micron pore, preferably 0.1 micron), stored frozen, and shipped frozen	
Holding Times	1-3 weeks (ERG still needs to confirm)	
Number of samples	89	
Duplicates	TBD (From the SIF website: "We recommend saving a duplicate set of samples in case of sample loss, whether due to shipping loss or cracked vials.")	

I believe I've sent this to you before, but here are the sample preparation details for UC Davis: http://stableisotopefacility.ucdavis.edu/no3samplepreparation.html

I'll send another update as soon as can.

Thanks,

Daisy Wang 703-829-0539

Eastern Research Group (ERG) 14555 Avion Parkway, Suite 200 Chantilly, VA 20151